

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions and listings of the claims in the application.

1. (currently amended) AAn in situ process for treating a naturally occurring ~~body of fluid~~ source of fresh water having a naturally occurring, continuous flow and containing at least one undesired component, said process comprising:

providing a fine porous device;

positioning said fine porous device in said ~~body of fluid~~ fresh water source;

passing a portion of said ~~body of fluid~~ fresh water through said fine porous device so as to remove said at least one undesired component therefrom and produce treated water while said flow carries said at least one undesired component away from said fine porous device; and

transferring said ~~portion of said body of fluid~~ treated water to a location away from a ~~remainder of said body of fluid~~ said fresh water source;

wherein said at least one undesired component is left in said fresh water source.

2. (canceled)

3. (currently amended) The process of claim 2-1 wherein said at least one undesired component is selected from the group consisting of sediment, solids suspended in said ~~body of fluid~~ fresh water source, pathogens, contaminants, germs, and microorganisms.

4. (original) The process of claim 3 wherein said pathogens are selected from the group consisting of bacteria, protozoa, amoeba, and viruses.

5. (original) The process of claim 3 wherein said microorganisms are selected from the group consisting of giardia cysts, cryptosporidium, pseudomonas, E-coli, legionella, bacteria, coliform, protozoan oocysts, algae, and viruses.

6. (currently amended) The process of claim 3 wherein said solids suspended in said ~~body of fluid~~ fresh water source are selected from the group consisting of metals, inorganic solids, and organic compounds.

7. (canceled)

8. (currently amended) The process of claim 1 further comprising:

providing a screen; and

positioning said screen in said ~~body of fluid~~ fresh water source such that said portion of said ~~body of fluid~~ fresh water passes first through said screen and then through said fine porous device.

9. (currently amended) The process of claim 1 further comprising:

providing a pump;

positioning said pump in said ~~body of fluid~~ fresh water source, said pump adapted to induce a scouring flow of said ~~portion of said body of fluid~~ said fresh water; and

inducing said ~~portion of said body of fluid~~ scouring flow of said fresh water to pass through across and scour said fine porous device.

10. (currently amended) The process of claim 1 further comprising:

providing a pump; and

placing said pump in fluid communication with said ~~portion of said body of fluid~~
treated water, said pump facilitating the transfer of said treated water to said location
away from said fresh water source; and

~~wherein said pump is used to transfer said portion of said body of fluid to said~~
~~location away from said remainder of said body of fluid.~~

pumping a reverse flow of said treated water to clean said fine porous device.

11. (currently amended) The process of claim 1 further comprising:

providing a structural support; and

securing said fine porous device to said structural support;

wherein said fine porous device and said structural support are ~~adapted to be~~
~~positioned in said body of fluid~~ fresh water source, said structural support allowing for
said flow to said fine porous device.

12. (original) The process of claim 11 wherein said structural support is a housing.

13. (currently amended) The process of claim 1 further comprising:

providing a pump;

placing said pump in fluid communication with said fine porous device and
another source of a fluid ; and

pumping said fluid from said another source into said ~~body of fluid~~ fresh water
source to clean said fine porous device.

14. (original) The process of claim 1 wherein said fine porous device is selected from the group consisting of ultrafilter membranes, microporous membranes, porous membranes, microscreens, nanofilters, reverse osmosis membranes, and particle filters.

15. (currently amended) AAn in situ process for treating a naturally occurring body of water source of fresh water having a naturally occurring, continuous flow and containing at least one undesired component, said process comprising:

providing a fine porous device, a structural support, a screen, and a first pump;

securing said fine porous device to said structural support;

positioning said fine porous device, said structural support, and said screen in said body of water fresh water source;

passing a portion of said body of water fresh water through said screen and then through said fine porous device so as to remove said at least one undesired component therefrom and produce treated water;

blocking ~~at least a portion of~~ said at least one undesired component with said fine porous device such that ~~said portion of~~ said at least one undesired component is left in a remainder of said body of water fresh water source, said flow carrying said at least one undesired component away from said fine porous device;

placing said first pump in fluid communication with said ~~portion of said body of water~~ treated water, said first pump adapted to transfer said ~~portion of said body of~~

~~water~~ treated water to a location away from said remainder of said body of water ~~fresh~~
water source; and

transferring said ~~portion of said body of water~~ treated water to said location away
from said remainder of said body of water fresh water source.

16. (currently amended) The process of claim 15 further comprising:

providing a second pump;

positioning said second pump in said ~~body of water~~ fresh water source, said
second pump adapted to induce a scouring flow of said ~~portion of said body of water~~
fresh water; and

cleaning said fine porous device by inducing said ~~portion of said body of water~~
scouring flow of said fresh water to pass across and scour said fine porous device.

17. (currently amended) The process of claim 15 further comprising:

placing said first pump in fluid communication with said fine porous device and
another source of a fluid; and

pumping said fluid from said another source into said ~~body of water~~ fresh water
source to clean said fine porous device.

18. (currently amended) ~~A fluid~~ An in situ water treatment system fluid comprising:

a naturally occurring ~~body of fluid~~ source of fresh water having a naturally
occurring, continuous flow and containing ~~including~~ at least one undesired component;

a screen positioned in said ~~body of fluid~~ fresh water source;

a fine porous device positioned in said ~~body of fluid~~ fresh water source such that a portion of said ~~body of fluid~~ fresh water is adapted to pass through said screen and then through said fine porous device, said fine porous device adapted to block ~~at least a portion of said~~ at least one undesired component when said portion of said ~~body of fluid~~ fresh water passes through said fine porous device so as to remove said at least one undesired component therefrom and produce treated water while said flow carries said at least one undesired component away from said fine porous device;

a conduit having a first end portion and a second end portion, said first end portion positioned in said ~~body of fluid~~ fresh water source such that it is adapted to be in fluid communication with said ~~portion of said body of fluid that has passed through said fine porous device~~ treated water, said second end portion positioned outside of said ~~body of fluid~~ fresh water source; and

a first pump located outside of said ~~body of fluid~~ fresh water source and connected to said second end portion of said conduit, said first pump adapted to transfer said ~~portion of said body of fluid~~ treated water to said second end portion of said conduit.

19. (currently amended) The fluid treatment system of claim 18 further comprising:

a second pump positioned in said ~~body of fluid~~ fresh water source, said pump adapted to induce a scouring flow of said ~~portion of said body of fluid~~ fresh water such that said ~~portion of said body of fluid~~ scouring flow of said fresh water passes across said fine porous device.

20. (currently amended) The fluid treatment system of claim 18 further comprising:

a structural support positioned in said ~~body of fluid~~ fresh water source and secured to said fine porous device.

21. (new) An in situ process for treating a naturally occurring source of fresh water containing at least one undesired component, said process comprising:

providing a fine porous device;

positioning said fine porous device in said fresh water source;

causing a flow of a portion of said fresh water through said fine porous device so as to remove said at least one undesired component therefrom and produce treated water;

transferring said treated water to a location away from said fresh water source; and

causing a scouring flow of a fluid to clean said fine porous device;

wherein said at least one undesired component is left in said fresh water source.

22. (new) The process of claim 21 further comprising:

providing a screen; and

positioning said screen in said fresh water source such that said portion of said fresh water passes first through said screen and then through said fine porous device.

23. (new) The process of claim 1 further comprising:

providing a pump, said pump facilitating said flow of said portion of said fresh water through said fine porous device, said pump also facilitating the transfer of said treated water to said location away from said fresh water source;

wherein said pump also causes said scouring flow by pumping a reverse flow of said treated water to clean said fine porous device.

24. (new) The process of claim 21 further comprising:

providing a structural support; and

securing said fine porous device to said structural support;

wherein said fine porous device and said structural support are positioned in said fresh water source, said structural support allowing for said portion of said fresh water to flow through said fine porous device.

25. (new) The process of claim 21 wherein the step of causing said scouring flow comprises pumping air across said fine porous device.

26. (new) The process of claim 21 further comprising:

providing a pump; and

positioning said pump in said fresh water source;

wherein said pump causes said scouring flow of said fresh water across said fine porous device.

27. (new) The process of claim 1 wherein said source of fresh water is selected from the group consisting of lakes, ponds, streams, rivers, creeks, quarries, lagoons, channels, and swamps.

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28. (new) The process of claim 1 wherein process is selected from the group consisting of nanofiltration, ultrafiltration, microfiltration, and particle filtration.